

What is claimed is:

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- 1 1. An integrated circuit comprising
2 a driver having an output node to be coupled to a conductor external to the
3 integrated circuit, such that the driver launches an initial voltage value on the
4 conductor when the driver changes state; and
5 a receiver having input hysteresis, the receiver including an input node
6 coupled to the output node of the driver, the input hysteresis having a threshold set
7 such that the initial voltage value does not change an output state of the receiver.
 - 1 2. The integrated circuit of claim 1 wherein the driver comprises a pullup
2 transistor having an output impedance, and a pulldown transistor having an output
3 impedance, the output impedance of the pullup transistor being greater than the
4 output impedance of the pulldown transistor.
 - 1 3. The integrated circuit of claim 2 wherein the output impedance of the pullup
2 transistor is at least five times greater than the output impedance of the pulldown
3 transistor.
 - 1 4. The integrated circuit of claim 1 further comprising:
2 a simultaneous bidirectional port that includes a data driver and data receiver,
3 the data driver including a closed loop impedance control circuit.
 - 1 5. The integrated circuit of claim 4 wherein the integrated circuit is a circuit
2 type from the group comprising: a processor, a processor peripheral, a memory, and a
3 memory controller.

1 17. The simultaneous bidirectional port circuit of claim 16 further including a
2 slew rate control circuit to control the output slew rate of the data driver.

1 18. The simultaneous bidirectional port circuit of claim 17 wherein the
2 synchronization circuit is configured to assert after the slew rate control circuit is
3 initialized.

1 19. The simultaneous bidirectional port circuit of claim 14 wherein the
2 synchronization circuit comprises:
3 a driver having an output node to be coupled to a conductor common to both
4 the simultaneous bidirectional port circuit and the second simultaneous bidirectional
5 port circuit, the driver having a pullup transistor and a pulldown transistor, the pullup
6 transistor having a higher output impedance than the pulldown transistor; and
7 a receiver having an input node coupled to the output node of the driver.

20. An integrated circuit comprising:

- a simultaneous bidirectional port to be coupled to a second simultaneous bidirectional port on a second integrated circuit;
- at least one initialization circuit to perform an initialization of the simultaneous bidirectional port; and
- a synchronization circuit to be coupled to a second synchronization circuit on the second integrated circuit, to indicate when the initialization of the simultaneous bidirectional data port and an initialization of the second bidirectional port is complete.

1 21. The integrated circuit of claim 20 wherein the at least one initialization circuit
2 comprises an output impedance control circuit.

